

Project Summary and Justification

Department Public Works & Utilities

Division Sanitary Landfill

The Capital Improvement Program for the 2001-2007 period is a continuing effort to provide an environmentally sound and integrated solid waste management system in Lincoln and Lancaster County.

Project 1 Bluff Road Landfill. Consisting of approximately 370 acres at Highway #77 and Bluff Road. (Continuation)

The Bluff Road landfill is essential to assure proper disposal of solid wastes for the City of Lincoln and Lancaster County in a manner protective to human health and the environment and to meet Nebraska Department of Environmental Quality (NDEQ) Title 132 Operating Permit Requirements and Federal regulatory requirements. The overall project involves the continued expansion and development of the facility.

a. Leachate Collection and Liner Facilities. (Continuation, 700900)

Federal and State landfill regulations require leachate collection and treatment facilities to protect against groundwater pollution. Failure to protect groundwater can result in sizable corrective action costs if leachate contamination occurs. Installation of leachate collection facilities is an on-going part of the site development and the funding identified in the program reflects this need.

b. Site Maintenance and Closure. (Continuation, 569112)

This is an on-going operation that meets the requirements for annual site maintenance and closure activities such as litter fence construction, drainage improvements, seeding, and landscaping for perimeter screening and improved site aesthetics. Funding in FY 03-04 is for additional litter fencing and drainage structures. These improvements are necessary to comply with State and Federal requirements as well as provide for aesthetic improvements necessary for operating in close proximity to the community.

c. Leachate Collection and Treatment Facilities. (Continuation, 569129)

Funds provide for design and construction of additional storage capacity and pretreatment for generated leachate. Cost effective methods for managing leachate have been evaluated and a preliminary management plan has been completed. The Leachate Management Plan prepared for the Landfill was used to develop project timing and funding identified in this six-year plan.

d. Gas Collection and Utilization Feasibility, Evaluation, and Construction. (Continuation, 701284)

A previous evaluation of landfill gas was performed at the Bluff Road Landfill and it concluded that a landfill gas extraction system is not currently required for the facility. These evaluations are performed every five years with the next scheduled for FY 00-01. The next evaluation may indicate that a gas extraction system is necessary and funding in FY 01-02 is for such an extraction system. The evaluation will also include the feasibility of utilizing landfill gas for electrical energy generation. This analysis will be conducted in cooperation with the Lincoln Electric System. The final determination on the installation of a gas extraction system within the six-year planning period will depend on several considerations including

Project Summary and Justification (Continued)

Department Public Works & Utilities

Division Sanitary Landfill

regulatory requirements, feasibility of energy production, and the need for odor control.

e. Final Cover Construction. (Continuation, 701294)

Funding provides for the design and construction of a final cover system on top of the landfill as required by regulations in areas where wastes have been placed to final elevation according to the site's permit conditions.

f. Additional Groundwater Monitoring Wells and Initial Geologic Borings for Site Expansion Evaluation. (Continuation, 569127)

Funds for additional groundwater monitoring wells provide for future evaluation of groundwater conditions at the site as required by the operating permit. In addition, the suitability of other areas available for future landfill development which are not currently permitted by the NDEQ will be evaluated and allow for planning for additional landfill capacity beyond the current site life of 2022.

g. Site Re-Permitting.

This project will provide for costs associated with re-permitting the facility in 2002 to correspond with expiration of the five-year permit in September 2003.

Project 2 North 48th Street Landfill and Transfer Station Site. Approximately 450 acres. (Continuation)

a. Closure Costs for Landfill East (310 acres) and Landfill West (140 acres). (Continuation, 569201)

The proposed project funding is for additional cover soil, drainage improvements, and revegetation of landfill areas associated with the City's old North 48th Street Solid Waste Landfill. This area is intended to be developed as a future park area. Compost materials and bio-solids may be utilized as a soil amendment to promote vegetative growth. In addition, State regulations specify proper closure procedures to protect the completed landfill and prevent impacts to surface water, groundwater, and air quality.

Additional funding may be necessary for corrective actions associated with groundwater and landfill gas at this site dependent upon NDEQ's review of a previously completed groundwater assessment study.

b. Closure Costs for Construction and Demolition Site. (Continuation, 569201)

These costs are for closure of the City's permitted Construction and Demolition Landfill.

Similar to project 2a., these funds will provide for additional cover soil, drainage improvements, and revegetation of landfill areas that are intended to be developed as a future park area. A minimum cover soil depth of two feet is required by State regulations for all areas associated with the Construction and Demolition Site.

Project Summary and Justification (Continued)

Department Public Works & Utilities

Division Sanitary Landfill

c. Parks Development.

There is no funding identified for this project during the six-year planning period. However, this project is identified at this time for the purpose of recognizing that additional capital improvements must occur at this site prior to use as park lands. An estimate of potential cost to develop this site is shown in the "cost beyond" column.

d. Air Quality Assessment. (Continuation, 569209)

An additional air quality assessment (Tier II) may have to be made in FY 01-02 as a result of the EPA Clean Air Act requirements.

e. Expansion of Existing Transfer Station Operations. (Continuation, 701293)

The identified funding is for expansion of the small vehicle waste transfer operation. The capacity of the existing transfer station does not allow for the expedient service during peak usage times which occurs primarily on weekend days and in the spring and summer months. The expanded facilities will reduce the amount of time customers sometimes must wait to dispose of waste materials.

Project 3 Solid Waste Management System - Volume Reduction (Phase I, Solid Waste Management Plan).

Proposed funding will provide for further evaluation of solid waste reduction alternatives, enhancements to the City's existing yard waste composting facility, evaluation and development of organic waste composting and materials recovery facility, and expansion of the City's recycling drop-off centers.

a. Solid Waste Management Plan Update. (Continuation, 701174)

An update of the Solid Waste Management Plan for the City of Lincoln and Lancaster County is scheduled for FY 04-05. The plan was originally completed in 1992 by the Phase I Environmental Management Plan Steering Committee and updated in 2000.

b. Construction and Demolition (C & D) Site.

Funding for the siting of a new construction and demolition disposal facility has been shifted to beyond the six-year planning period based on the expected site life lasting through the year 2010, or beyond. Although no funding is identified in the six-year period, this project is listed as a reminder that the community will be considering a new C & D landfill site in the relative near term for this waste stream.

c. Organic Waste Composting/Materials Recovery Facility.

1. Feasibility Study.
2. Upgrades to Existing Composting Facility. (Continuation, 569133)

The 1992 Solid Waste Management Plan identifies an organic waste composting and material recovery facility as the next major element to increase the diversion of material from the Landfill.

Project Summary and Justification (Continued)

Department Public Works & Utilities

Division Sanitary Landfill

Sub-project 1. is a feasibility study on the development of an expanded organic waste processing and material recovery facility is identified in FY 05-06. Construction of facilities is anticipated to occur beyond the current six-year planning period.

Sub-project 2. of this project provides funding for upgrades to the existing yard waste composting facility at the Bluff Road Landfill. These upgrades include improvements to storage areas for finished compost, additional site access for purchasers of compost, and potential required improvements for the management of surface water runoff.

d. Recycling Drop-Off Sites.

1. Existing Site Maintenance/Improvements. (Continuation, 700850 and 700853)
2. Expansion of Recycling Drop-Off Program. (Continuation, 700942, 700943, and 700944)

Close to 50% of the people in Lincoln utilize the drop-off sites. Currently, there are eight (8) existing recycling sites in north Lincoln and only six (6) in south Lincoln. More people reside in south Lincoln than north Lincoln. The recycling drop-off sites in southeast Lincoln are the largest and receiving the greatest amounts of materials. These existing sites cannot be readily expanded to accept more material.

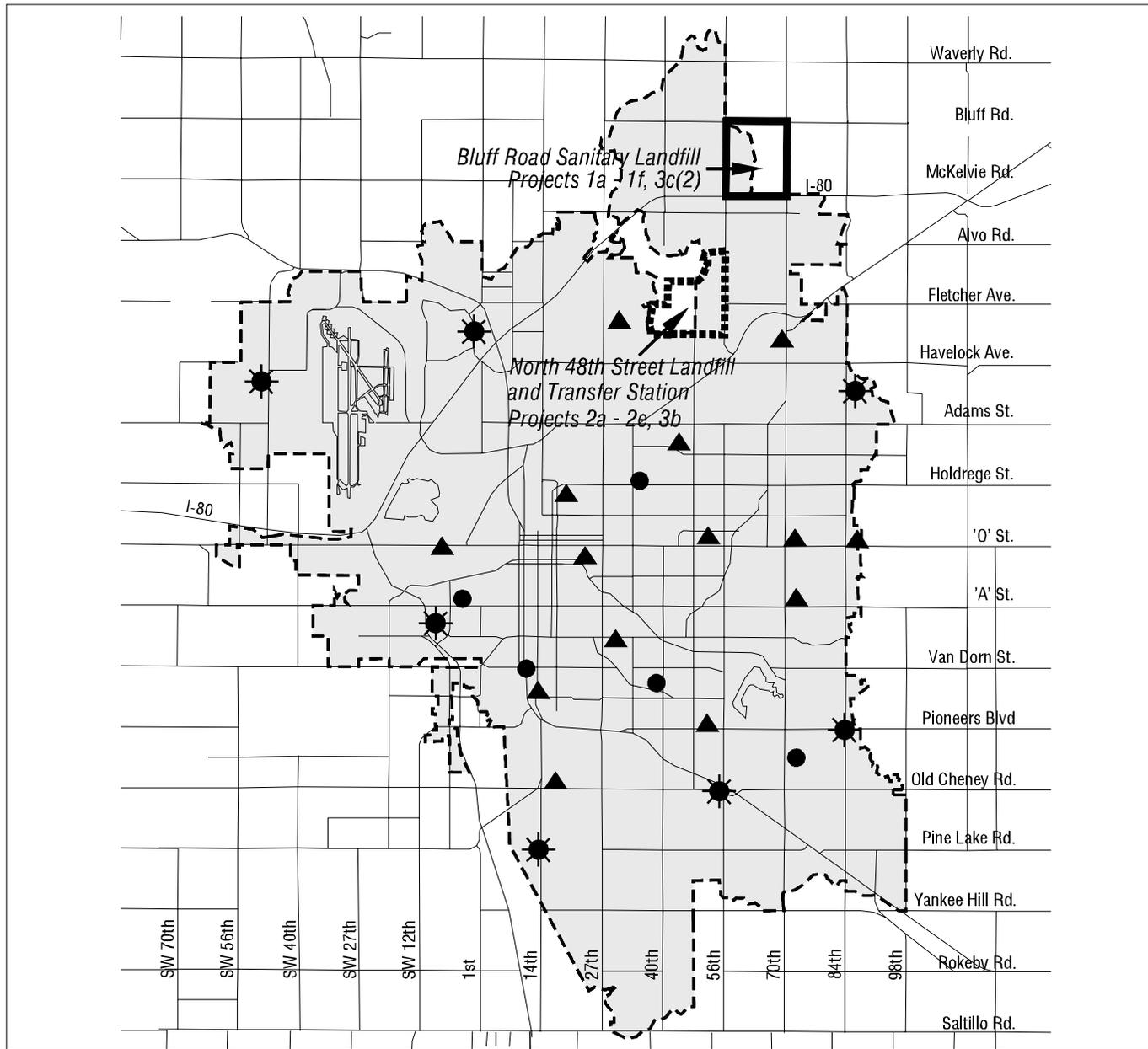
Due to size, traffic, noise, and concerns about litter and illegal dumping, the siting of additional drop-off sites has become very difficult in commercial areas. Various publicly owned properties are being investigated, but no agreements for additional sites in southeast Lincoln have been obtained.

Sub-project 1. of this project provides for repairs and improvements to existing drop-off sites and includes anticipated asphalt resurfacing, fencing, and landscaping. These improvements are critical to continue with the current use, improve appearance, and gain greater acceptance of nearby commercial and residential property owners.

Sub-project 2. of this project provides for the expansion of the recycling drop-off sites program. Funds have been added for the purchase of property in the event that a recycling site would be co-located with a government facility or to acquire land in a commercial development. Identified funding also includes the necessary site development costs associated with the recycling drop-off sites.

Lincoln CIP 2001 - 2007

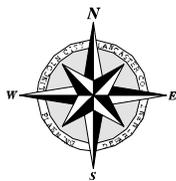
Public Utilities Solid Waste Operations



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Lincoln Future Service Limit Shown as Grey

Map prepared by
City - Co. Planning Dept
GIS Section



M I L E S



Project 3d: Recycling Drop-off Sites

- ▲ Existing Multi-Material Sites
- Existing Newspaper Sites
- ☀ Potential New Multi-Material Sites

List of Projects*Department: Public Works & Utilities / Sanitary Landfill*

Project Number	Project Title
1.	BLUFF ROAD LANDFILL. Consisting of approximately 370 acres at Highway #77 and Bluff Road. (Continuation)
1a.	Leachate Collection and Liner Facilities. (Continuation, 700900)
1b.	Site Maintenance and Closure. (Continuation, 569112)
1c.	Leachate Collection and Treatment Facilities. (Continuation, 569129)
1d.	Gas Collection and Utilization Feasibility, Evaluation, and Construction. (Continuation, 701284)
1e.	Final Cover Construction. (Continuation, 701294)
1f.	Additional Groundwater Monitoring Wells and Initial Geologic Borings for Site Expansion Evaluation. (Continuation, 569127)
(1g.)	Site Re-Permitting.
2.	NORTH 48th STREET LANDFILL AND TRANSFER STATION SITE. Approximately 450 acres. (Continuation)
2a.	Closure Costs for Landfill East (310 acres) and Landfill West (140 acres) . (Continuation, 569201)
2b.	Closure Costs for Construction and Demolition Site. (Continuation, 569201)
2c.	Parks Development.
2d.	Air Quality Assessment. (Continuation, 569209)
2e.	Expansion of Existing Transfer Station Operations. (Continuation, 701293)
3.	SOLID WASTE MANAGEMENT SYSTEM - VOLUME REDUCTION (Phase I, Solid Waste Management Plan).
(3a.)	Solid Waste Management Plan Update. (Continuation, 701174)
3b.	Construction and Demolition (C & D) Site.
3c.	Organic Waste Composting/Materials Recovery Facility. (1.) Feasibility Study. 2. Upgrades to Existing Composting Facility. (Continuation, 569133)
3d.	Recycling Drop-Off Sites. 1. Existing Site Maintenance/Improvements. (Continuation, 700850 and 700853) 2. Expansion of Recycling Drop-Off Program. (Continuation, 700942, 700943, and 700944)

*Project number in parenthesis indicates project is not shown on the map.

2001 - 2007 CAPITAL IMPROVEMENT PROGRAM

DIVISION: SANITARY LANDFILL

(1)	(2)	(3)	5% Inflation per year (4)											
PROJ. NO.	PROJECT TITLE	PROJ. PRIO.	2001-2002		2002-2003		2003-2004		2004-2005		2005-2006		2006-2007	
			FS		FS		FS		FS		FS		FS	
1.	Bluff Road Landfill. Consisting of approximately 370 acres at Highway #77 and Bluff Road. (Continuation)													
1.a.	Leachate Collection and Liner Facilities (Continuation 700900)	A			2300.0	LF			350.0	LF	2400.0	LF		
1.b.	Site Maintenance and Closure (Continuation, 569112)	A			25.0	LF	390.0	LF	45.0	LF	420.0	LF	101.0	LF
1.c.	Leachate Collection and Treatment Facilities (Continuation, 569129)	A							1700.0	LF				
1.d.	Gas Collection and Utilization Feasibility, Evaluation, and Construction (Continuation 701284)	A	499.0	LF							1930.0	LF		
1.e.	Final Cover Construction (Continuation, Continuation 701294)	A	940.0	LF			990.0	LF	810.0	LF			2000.0	LF
1.f.	Additional Groundwater Monitoring Wells and Initial Geologic Borings for Site Expansion Evaluation. (Continuation, 569127)	A	50.0	LF			75.0	LF						
1.g.	Site Re-Permitting	B			30.0	LF								

(5)	(6)	(7)		(8)	(9)	(10)	(11)						(1)
TOTAL FOR SIX YEARS (000's)	COST BEYOND 2004-2005 (000's)	PRIOR APPROPRIATIONS		TOTAL CAP COSTS (000's) (5)+(6)+(7)	COMP PLAN CONFORM	STATUS OF PLANS	COST BREAKDOWNS FOR SIX-YEAR EXPENDITURES (000's)						PROJ. NO.
		(000's)	YEAR FS				PRELIM PLANS	FINAL PLANS	LAND ACQUISITION	CONST	EQUIP / FURNISH	OTHER (EXPLAIN)	
5,050.0	16,600.0	2,609.3	99-01 LF	24,259.3		7		151.5			4,898.5		1.
981.0	5,379.5	819.2	99-01 LF	7,179.7		0					981.0		1.a.
1,700.0	1,300.0	800.6	99-01 LF	3,800.6		2	34.0	85.0			1,581.0		1.b.
2,429.0	2,500.0	81.9	99-01 LF	5,010.9		2	72.8	121.5			2,234.7		1.c.
4,740.0	29,050.0	1,499.5	99-01 LF	35,289.5		7		142.2			4,597.8		1.d.
125.0	0.0	188.0	99-01 LF	313.0		2		8.7			116.3		1.e.
30.0	375.0	None		405.0		0						30.0 (Permitting)	1.f.
													1.g.

2001 - 2007 CAPITAL IMPROVEMENT PROGRAM

DIVISION: SANITARY LANDFILL

(1) PROJ. NO.	(2) PROJECT TITLE	(3) PROJ. PRIO.	(4) 5% Inflation per year						
			2001-2002 FS	2002-2003 FS	2003-2004 FS	2004-2005 FS	2005-2006 FS	2006-2007 FS	
2.	North 48th Street Landfill and Transfer Station Site. Approximately 450 acres. (Continuation)								
2.a.	Closure Costs for Landfill East (310 acres) and Landfill West (140 acres) - (Cont. 569201)	A	420.0 LF		100.0 LF		50.0 LF		
2.b.	Closure Costs for Construction and Demolition Site (Continuation 569201)	A	270.0 LF		215.0 LF		280.0 LF		200.0 LF
2.c.	Parks Development (See narrative of explanation for "no funding")	C							
2.d.	Air Quality Assessment (Continuation 569209)	B	20.0 LF						25.0 LF
2.e.	Expansion of Existing Transfer Station Operations (Continuation 701293)	B		360.0 LF					
3.	Solid Waste Management System - Volume Reduction (Phase I, Solid Waste Management Plan)								
3.a.	Solid Waste Management Plan Update (Continuation, 701174)	B					80.0 LF		
3.b.	Construction and Demolition (C & D) Site (See narrative of explanation for "no funding")	B							
3.c.	Organic Waste Composting/Materials Recovery Facility	B							
	1. Feasibility Study							50.0 LF	
	2. Upgrades to Existing Composting Facility (Continuation 569133)			36.0 LF			200.0 LF		
3.d.	Recycling Drop-Off Sites	A							
	1. Existing Site Maintenance/Improvements (Cont 700850 & 700853)		26.0 LF	30.0 LF	32.0 LF	33.0 LF	35.0 LF		36.1 LF
	2. Expansion of Recycling Drop-Off Program (Cont. 700942, 943 & 944)			35.8 LF	210.0 LF				
	FUNDING SOURCE BREAKDOWN :								
	LF (Landfill Revenue)		2225.0	2816.8	2012.0	3548.0	4835.0		2362.1
	DIVISION TOTAL		2,225.0	2,816.8	2,012.0	3,548.0	4,835.0		2,362.1

(5)	(6)	(7)		(8)	(9)	(10)	(11)						(1)			
							COST BREAKDOWNS FOR SIX-YEAR EXPENDITURES (000's)									
							TOTAL FOR SIX YEARS (000's)	COST BEYOND 2004-2005 (000's)	PRIOR APPROPRIATIONS (000's)	YEAR	FS	TOTAL CAP COSTS (000's) (5)+(6)+(7)		COMP PLAN CONFORM	STATUS OF PLANS	PRELIM PLANS
																2.
570.0	800.0	1,392.7	99-01	LF	2,762.7		7			17.1		552.9				2.a.
965.0	1,050.0	None			2,015.0		5			67.5		897.5				2.b.
0.0	Unknown	None			0.0		1									2.c.
45.0	50.0	None			95.0		0			45.0						2.d.
360.0	Unknown	30.0	99-01	LF	390.0		5	7.2	18.0			334.8				2.e.
																3.
80.0	100.0	50.0	99-01	LF	230.0		0		80.0							3.a.
0.0	5,200.0	None			5,200.0		1									3.b.
																3.c.
50.0	2,750.0	None			2,800.0		0	50.0								
236.0	300.0	376.8	99-01	LF	912.8		2		18.9			217.1				3.d.
192.1	366.2	97.3	99-01	LF	655.6		5		9.6			182.5				
245.8	1,160.0	310.0	99-01	LF	1,715.8		5		12.3			233.5				
17,798.9																
17,798.9																